

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

At page 182, line 4, prior to "a chimeric", insert --(SEQ ID NO:35)--.

At page 182, line 8, prior to "was injected", insert --(SEQ ID NO:36)--.

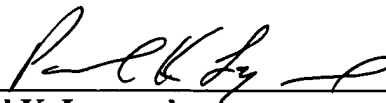
At page 205, line 28, delete "Figure 157)" and replace therewith --Figure 157--.

REMARKS

New pages 1-119 are provided to comply with the Sequence Rules set forth in 37 CFR §§1.821-1.825. The specification has been amended herein to insert the SEQ ID Numbers into the text to comply with rules set forth in 37 CFR §§1.821-1.825. In addition, enclosed herewith is a Statement to Support Filing and Submission of DNA/Amino Acid Sequences in Accordance with 37 CFR §§1.821 through 1.825 and a computer readable form (CRF). A Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures was not attached to the Communication from the PTO.

The application as filed on May 12, 1999 contained nucleotides sequences, which are now contained within the Sequence Listing. The enclosed new pages 1-119 contain the Sequence Listing, formatted under the new rules for submitting Sequence Listings, support for which can be found throughout the application as originally filed. No new matter has been added. In addition, the contents of the paper copy of the Sequence Listing and computer readable copy of the Sequence Listing, submitted in accordance with 37 CFR §1.821(c) and (e), are the same. Applicants submit that the present response is complete.

Respectfully submitted,



Paul K. Legaard

Registration No. 38,534

Date: **27 October 2000**
WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

In the Specification:

Please replace the paragraph beginning at page 144, line 3 of the specification with the following rewritten paragraph:

SUB E44
90
In other preferred embodiments, the nucleic acid fragment comprise the consensus sequence NNNNCNNNNNNNNUNNANNNNNNNN (SEQ ID NO:1) or NNNNCNNNNNNNNUNNANNNN NNNN (SEQ ID NO:384) and wherein the sequence has a first double stranded region, an internal loop region, a second double stranded region and an end loop region. In other preferred embodiments, an *in silico* representation of a nucleic acid fragment that is conserved across at least two species comprises the consensus sequence NNNNCNNNNNNNNUNNANNNNNNNN (SEQ ID NO:1) or NNNNCNNNNNNNNUNNANNNNNNNN (SEQ ID NO:384). In other preferred embodiments, a purified and isolated nucleic acid fragment that is conserved across at least two species comprises the sequence NNNNCNNNNNNNNUNNANNNNNNNN (SEQ ID NO:1) or NNNNCNNNNNNNNUNNANNNNNNNN (SEQ ID NO:384). In other preferred embodiments, a purified and isolated nucleic acid fragment comprises the human sequence (SEQ ID NO:2) UUUACAACAUAUAUCUAGUUUACAGAAAAAUC. In other preferred embodiments, an *in silico* representation of a nucleic acid fragment comprises the human sequence UUUACAACAUAUAUCUAGUUUACAGAAAAAUC (SEQ ID NO:2).

Please replace the paragraph beginning at page 151, line 16 of the specification with the following rewritten paragraph:

SUB E47
D3
In other preferred embodiments, a nucleic acid comprising the consensus sequence NNUNNNNNNNNGAUCNUNNNNGAUNCUUUNUNNNANCCNNNNNNN (SEQ ID NO:20), NNUNNNNNNNNGAUCNUNNNNGAUNCUUUNUNNNANCCNNNNNNN (SEQ ID NO:415), or NNUNNNNNNNNGAUCNUNNNNGAUNCUUUNUNNNACCNNNNNNN (SEQ ID NO:416) and having a first double stranded region, a first internal loop region, a second double stranded region, and a first end loop region, a third double stranded region, and a second end loop region. In other preferred embodiments, a purified and isolated nucleic acid fragment comprising the human sequence (SEQ ID NO:21) UAUAAUAUGGAUCUUUUAUGAUUCUUUUUGUAAGCCCUAG

DOCKET NO.: IBIS-0171

PATENT

123 SUB E47
GGGC. In other preferred embodiments, a purified and isolated nucleic acid fragment comprising the mouse or rat sequence (SEQ ID NO:22) GAUAAAUAUGGAUCUUUAAAGAUUCUUUUUG UAAGCCCCAAGGGC.

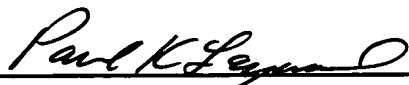
REMARKS

Substitute pages 1-117 are provide to comply with the Sequence Rules set forth in 37 CFR §§ 1.821-1.825, correcting the inadvertent errors listed in the Raw Sequence Listing Error Report. In addition, Applicants have amended the paragraphs beginning at page 144, line 3 and page 151, line 16 as suggested by the Examiner. No new matter has been added. In addition, enclosed herewith is a Statement to Support Filing and Submission of DNA/Amino Acid Sequences in Accordance with 37 CFR §§ 1.821-1.825 and a computer readable form (CRF). The contents of the paper copy of the Sequence Listing and computer readable copy of the Sequence Listing, submitted in accordance with 37 CFR §1.821(c) and (e), are the same.

Applicants acknowledge receipt of the "Attachment for PTO-948" paper informing Applicants of the newly interpreted drawing requirements. Applicants, however, have not yet received a PTO-948 form.

The Examiner is invited to contact Applicants' undersigned representative at (215) 564-8906 if there are any questions regarding Applicants' claimed invention. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,


Paul K. Legaard
Registration No. 38,534

Date: August 24, 2001
WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

VERSION WITH MARKINGS TO SHOW CHANGES MADE**In the Application:**

Pages 1-129 of the application containing the Sequence Listing have been deleted and replaced with new pages 1-117 containing the amended Sequence Listing.

In the Specification:

Paragraph beginning at page 144, line 3 of the specification has been amended as follows:

In other preferred embodiments, the nucleic acid fragment comprise the consensus sequence NNNNCNNNNNNNNUNNANNNNNNNN (SEQ ID NO:1) or NNNNCNNNNNNNU NNANNNNNNNNN (SEQ ID NO:384) and wherein the sequence has a first double stranded region, an internal loop region, a second double stranded region and an end loop region. In other preferred embodiments, an *in silico* representation of a nucleic acid fragment that is conserved across at least two species comprises the consensus sequence NNNNCNNNNNNNNUNNANN NNNNNN (SEQ ID NO:1) or NNNNCNNNNNNNNUNNANNNNNNNNN (SEQ ID NO:384). In other preferred embodiments, a purified and isolated nucleic acid fragment that is conserved across at least two species comprises the sequence NNNNCNNNNNNNNUNNANNNNNNNNN (SQE ID NO:1) or NNNNCNNNNNNNNUNNANNNNNNNNN (SEQ ID NO:384). In other preferred embodiments, a purified and isolated nucleic acid fragment comprises the human sequence (SEQ ID NO:2) UUUACAACAUAUAUCUAGUUUACAGAAAAAUC. In other preferred embodiments, an *in silico* representation of a nucleic acid fragment comprises the human sequence UUUACAACAUAUAUCUAGUUUACAGAAAAAUC (SEQ ID NO:2).

Paragraph beginning at page 151, line 16 of the specification has been amended as follows:

In other preferred embodiments, a nucleic acid comprising the consensus sequence NNUNNNNNNNNGAUCNUNNNNGAUNCUUUNUNNNANCCNNNNNNNN (SEQ ID NO:20), NNUNNNNNNNNGAUCNUNNNNGAUNCUUUNUNNNANCCNNNNNNNN (SEQ ID NO:415), or NNUNNNNNNNNGAUCNUNNNNGAUNCUUUNUNNNACCNNNNNNNN (SEQ ID NO:416) and having a first double stranded region, a first internal loop region, a second double stranded

region, and a first end loop region, a third double stranded region, and a second end loop region. In other preferred embodiments, a purified and isolated nucleic acid fragment comprising the human sequence (SEQ ID NO:21) UAUAAUAUGGAUCUUUUAUGAUUCUUUUUGUAAGCCCUAGGGC. In other preferred embodiments, a purified and isolated nucleic acid fragment comprising the mouse or rat sequence (SEQ ID NO:22) GAUAAUAUGGAUCUUUAAAGAUUCUUUUUGUAAGCCCCAAGGGC. [In other preferred embodiments, a purified and isolated nucleic acid fragment comprising the rat sequence GAUAAUAUGGAUCUUUAAAGAUUCUUUUUGUAAGCCCAAGGGC.]